

A NEW SPECIES OF TICK FROM THE TRANSVAAL.

By Professor L. G. NEUMANN, of Toulouse.

RHIPICENTOR VICINUS, *n. sp.*

Male.—*Body* sub-oval, wider near the posterior third, slightly constricted behind the eyes, 6 mm. long (rostrum included), 3.2 mm. wide near the posterior third. *Dorsal shield* slightly convex, shining, chestnut brown in colour, without spots, a narrow margin of the abdomen showing beyond the shield, in the posterior two thirds; cervical grooves deep and wide, spreading out widely, marginal groove commencing behind the eyes, deep, rather close to the margin, terminating in the groove between the two last festoons; punctuations large, sub-equal, not very numerous, very distant from each other, arranged in lines near the lateral margins, one to two punctuations on each festoon; more numerous in front of the eyes; in front of the festoon a crescent-shaped depression, marked by fine punctuations. Eyes flat, yellowish, marginal, three small punctuations forming a border on the inner side. *Ventral surface* reddish yellow, with a few very short hairs. *Anal groove* semi-circular, opening to the front, supported behind by a single ano-marginal groove which terminates at the median festoon; genital grooves diverging widely behind coxae IV; ventral festoons well marked, wider than long, no groove limiting them in front. No caudal prolongation. Peritremes of a medium size, comma shaped, with the prolongation extending postero-dorsally. *Rostrum* 0.92 mm. long (from the tip of the palpi to the point of the posterior angles). Dorsal surface of the base twice as wide as long, lateral angles near the anterior third, very sharp and projecting, the posterior angles prominent but not spiniform, prolonged in front by a slight projection, which bounds a depression on the dorsal surface almost equal to a third of the width. *Hypostome* wide, slightly spatulate, six rows of strong teeth present. Palpi as wide as long, convex on their external edges; the first article scarcely visible, the second nearly twice as wide as long, prolonged in a strong, retrograde spine on its postero-ventral margin, and bearing a fringe of whitish hairs on the inner ventral margin; the third article without ventral spines; the fourth article small and hidden in the pit of the third article. *Legs* strong. Coxae I as long as the dorsal surface of the rostrum, divided into two strong, sub-equal contiguous spines which form three-quarters of their length; coxae II and III divided on their posterior margins into two flat, sharp spines, which are as wide as long; coxae IV large, almost as wide as long, provided on their posterior margins with two long, narrow sub-equal spines, well separated from each other, the inner one a little larger, not as long as the coxa. Second article of the first pair of legs provided near the distal extremity with a spine, dorsal, retrograde, flat, aliform, and as wide as long. The third, fourth, and fifth articles short and thick, but more slender than those of *R. bicornis*. Tarsi small, sloping at the distal end, with a small spur and weak claws.

Female.—*Body* oval, 6 mm. long (rostrum included), 3 mm. wide, sides convex. *Shield* scarcely longer (2.5 mm.) than wide (2.3 mm.), irregularly oval, deep chestnut brown; cervical grooves deep in front, prolonged almost to the posterior margin; lateral grooves deep and wide, each joining the corresponding cervical grooves in front and behind, and formed by punctuations in lines; punctuations large, not very numerous, more numerous outside of the lateral grooves, about a score in the median area; a few very fine punctuations near the lateral margins. Eyes similar to those of the male, situated slightly in front of the lateral angles, bordered on the inner margin by four large punctuations. *Dorsal surface* with a few very short hairs; two deep marginal grooves; three longitudinal grooves, the median of which is confined to the posterior quarter, the other two are symmetrical, extending from the posterior margin, and widening out in front they join the postero-lateral margin of the shield; the festoons are very distinct. The *ventral surface* has the grooves well formed, punctuations fine; a very few short hairs. Peritremes wide, sub-triangular (oval with an outer prolongation), whitish in colour. *Rostrum* 1.2 mm. long. Dorsal surface of base nearly three times as wide as long, half as wide as the dorsal shield, the lateral projecting angles near the middle of the length, the posterior angles wide, and not projecting, scarcely passing beyond the margin; porose areas oval, nearly twice as long as wide, parallel, separated by a distance equal to their small diameter. *Hypostome* as in the male. Palpi more than twice as long as wide; the second article longer than wide, and longer than the third article, prolonged in a short retrograde spine on its posterior ventral margin. *Legs* long, not so strong as those of the male. Coxae I as in the male, spines just as strong; coxae II, III, and IV with two short flat spines, diminishing in size from coxae II to IV, on the last of which they are small and widely separated; second article of the first pair of legs as in the male. The other articles (tarsi included) longer and not so thick as in the male.

Described from two males and two females collected at Pretoria on *Erinaceus frontalis*, Bennett, by C. W. Howard.

OBSERVATIONS.

I recently described,* under the name of *Rhipicephalus gladiger*, a species which has many characters analogous to this. I remarked then that the form and size of coxae IV of the male placed it near to *Dermacentor*; the anal shields are so slightly chitinized that one could consider them as lacking, a fact which increases the resemblance to the male *Dermacentor*. It seems that, as in that genus, the chitinous sexual organs are concentrated in coxae IV, instead of in the posterior part of the ventral surface. But the form of the rostrum, especially in the female, made me place the species in the genus *Rhipicephalus*.

In the early part of December, 1907, I received from Mr. C. W. Howard the specimens which are the types of *Rhipicentor vicinus*. In this species one cannot deny the absence of anal shields in the male, and, as Mr. Howard remarked to me, it ought to have some

*L. G. Neumann. Notes sur les Ixodidés, VI. Archives de Parasitologie, vol XII, 1908, p. 8.

connection with a species of *Dermacentor*. A second examination of *Rhipicephalus gladiger* brought me definitely to the conclusion that the anal shields were absent. *Rhipicephalus* is, therefore, no more in question. It is apparently an intermediate form between *Rhipicephalus* and *Dermacentor*. On the 21st of December I wrote to Mr. Howard that I intended to reunite the two species in a new genus which I proposed to call *Rhipicentor*.

It seems that the same thing occurred to Messrs. Nuttall and Warburton, for, by a rare coincidence, it is the same name chosen by them in a recent work* in which they describe, under the name of *Rhipicentor bicornis*, the species which I called *Rhipicephalus gladiger*. At the same time they gave the characters of the new genus which they establish in that paper. The publication of this work of Nuttall and Warburton having preceded my "Notes VI," it is evident that *Rhipicentor bicornis* must have the preference over *Rhipicentor gladiger*.

A comparison of the two species of the new genus show the following principal differences:—

Rhipicentor bicornis.

Male.—Base of rostrum, with posterior angles prolonged into a spine. Coxae IV with spines unequal, the inner one almost double the outer one.

Female.—Dorsal shield scarcely longer than wide. Palpi short. Coxae IV with spines longer than wide.

Rhipicentor vicinus.

Male.—Base of rostrum, with posterior angles simply projecting. Coxae IV with spines almost equal.

Female.—Dorsal shield scarcely longer than wide. Palpi long. Coxae IV with spines as wide as long.

* G. H. F. Nuttall and C. Warburton. On a new genus of Ixodoidea, together with a description of eleven new species of ticks. Proc. of the Cambridge Philosophical Society, vol. XIV. 1907, p. 398.